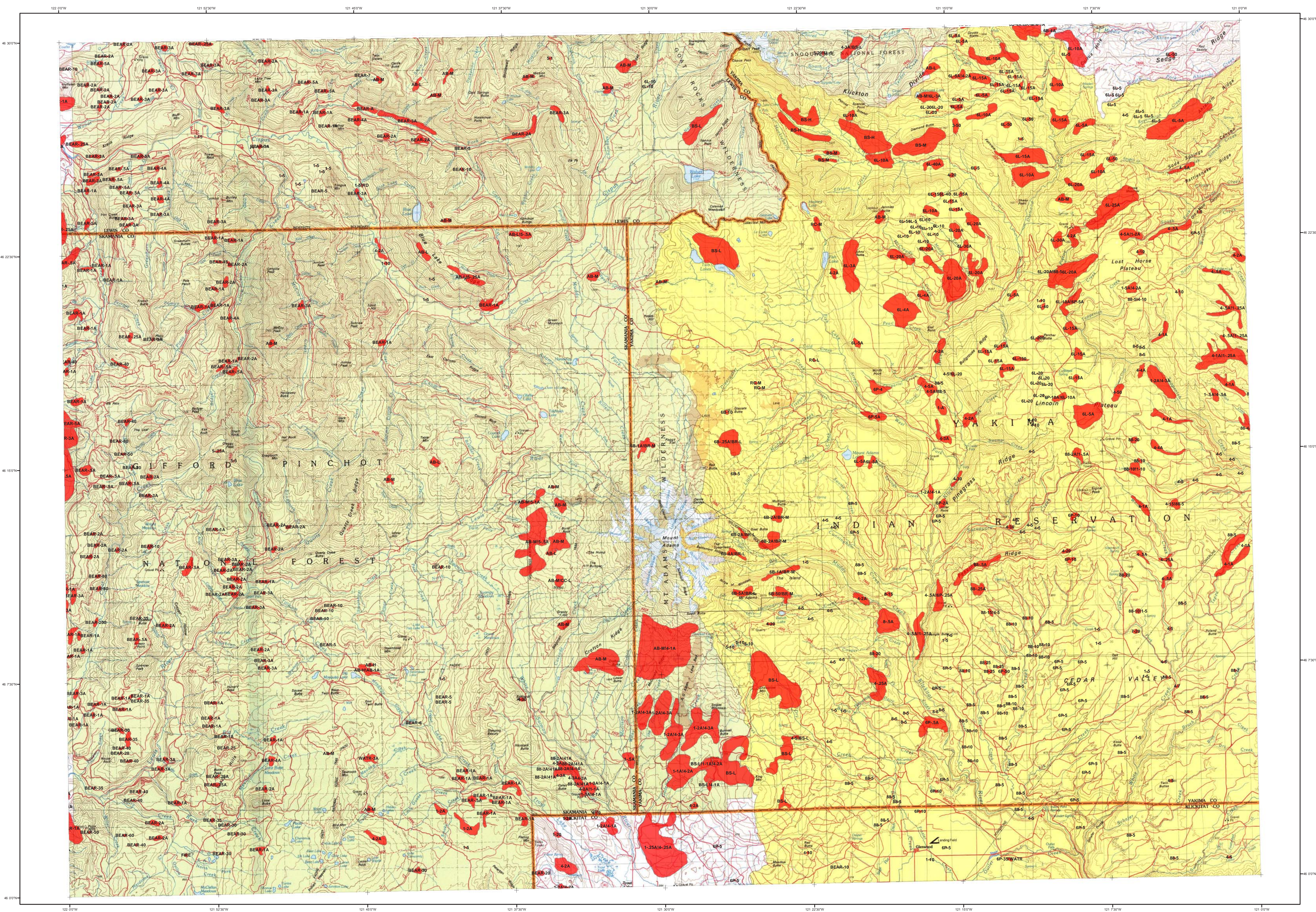


****DRAFT****

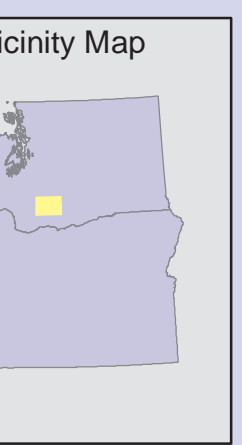
2003 Aerial Insect and Disease Survey Mt. Adams - Quad 4F



Defoliators		Mortality Agents	
Code	Damaging Agent	Code	Damaging Agent
AS	Spruce aphid	1	Douglas-fir beetle
BB	Western blackheaded budworm	2	Douglas-fir engraver
BM	Modoc budworm	3	Spruce beetle
BP	Sugar pine tortrix	4	Fir engraver
BS	Western spruce budworm	5	Western balsam bark beetle
BY	Burn's light/longhorn beetle	6	Mountain pine beetle
CH	Larch	7	Mountain pine beetle
HL	Western hemlock looper	8	Mountain pine beetle
LG	Green striped forest looper	9	Mountain pine beetle
LS	Black pine leaf scale	10	Mountain pine beetle
MD	Douglas-fir budmoth	11	Mountain pine beetle
ML	Larch budmoth	12	Mountain pine beetle
MN	Douglas-fir needle midge	13	Mountain pine beetle
MS	Spruce budmoth	14	Mountain pine beetle
ND	Needle miner	15	Mountain pine beetle
NJ	Needle miner	16	Mountain pine beetle
NK	Needle miner	17	Mountain pine beetle
NL	Needle miner	18	Mountain pine beetle
NP	Needle miner	19	Mountain pine beetle
NS	Needle miner	20	Mountain pine beetle
NT	Needle miner	21	Mountain pine beetle
NW	Needle miner	22	Mountain pine beetle
CL	Western oak looper	23	Mountain pine beetle
PC	Pine needle cast	24	Mountain pine beetle
PH	Phantom hemlock looper	25	Mountain pine beetle
PM	Pandora moth	26	Mountain pine beetle
PN	Pine needle/needle miner	27	Mountain pine beetle
PS	Pine needle scale	28	Mountain pine beetle
RC	Needle cast	29	Mountain pine beetle
S	Sawfly	30	Mountain pine beetle
SD	Sawfly	31	Mountain pine beetle
SF	Sawfly	32	Mountain pine beetle
SH	Sawfly	33	Mountain pine beetle
SK	Sawfly	34	Mountain pine beetle
SL	Sawfly	35	Mountain pine beetle
SM	Sawfly	36	Mountain pine beetle
SNC	Swiss needle cast	37	Mountain pine beetle
SP	Sawfly	38	Mountain pine beetle
SV	Sawfly	39	Mountain pine beetle
TA	Tent caterpillar, alder	40	Mountain pine beetle
TC	Tent caterpillar, other	41	Mountain pine beetle
TM	Douglas-fir tussock moth	42	Mountain pine beetle
TS	Tent caterpillar, aspen	43	Mountain pine beetle

Legend

2003 Draft Insect and Disease Aerial Survey Data



****DRAFT****

USGS 100K Quad - Mt. Adams; 4F

2003 Aerial Insect and Disease Detection Survey

Mapscale: 1:100,000

Date: August 22, 2003

Map base data is from the National Geographic TOPO! series for Oregon and Washington.

****DISCLAIMER****

The insect and disease data presented should only be used as an indicator of insect and disease activity, and should be ground-checked for precise location, extent, severity and causal agent.

Color coded polygons show locations where trees were recently killed or defoliated. Intensity of damage is variable and not all trees within coded polygons are dead or defoliated.

The cooperators reserve the right to correct, update, modify or replace GIS products without notice. Using this map for purposes other than those for which it was intended may yield inaccurate or misleading results.

How the Aerial Surveys Are Conducted

Data represented on this map are based on trees visibly affected by forest insects and diseases detected and recorded during aerial survey flights conducted by the USDA Forest Service and the Washington Department of Natural Resources. Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species; diagnose causal agents correctly; estimate intensity; delineate the extent of damage; and precisely record this information on a georeferenced, digital map. Air turbulence, cloud shadows, distance from aircraft, haze, smoke and observer experience can all affect the quality of the survey. These data summaries provide an estimate of conditions on the ground and may differ from estimates derived by other methods.

The aerial survey provides information on the current status for many causal agents, and is important when examining insect activity trends by comparing historical and current survey data over large areas.

Overview surveys are a 'snap shot' in time and therefore may not be timed to accurately capture the true extent or severity of a particular disturbance activity. Specially designed surveys with modified flight patterns and timing may be conducted to more accurately delineate the extent and severity of a particular disturbance agent. Special surveys, such as Swiss needle cast surveys, are conducted when resources are available to address situations of sufficient economic, political or environmental importance.

DIRECT ALL INQUIRIES TO:

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Forest Health
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Olympia, WA 98504

-- OR --

USDA Forest Service, Region 6
Natural Resources
Forest Health Protection
PO Box 3623
Portland, Oregon 97208